

Title (en)

LIGHTING DEVICE FOR VEHICLES

Title (de)

BELEUCHTUNGSVORRICHTUNG FÜR FAHRZEUGE

Title (fr)

DISPOSITIF D'ÉCLAIRAGE POUR VÉHICULES

Publication

EP 3176500 B1 20201230 (EN)

Application

EP 16201409 A 20161130

Priority

IT UB20156264 A 20151204

Abstract (en)

[origin: EP3176500A1] A lighting device for vehicles (4) comprising a container body (8) having at least one light source (16) to emit a light beam (44), a light guide (24) having a light guide body (28) which extends from a light inlet wall (32), facing said light source (16), to a light outlet wall (36), adapted to propagate said light beam (44). Advantageously, the light guide body (28) comprises, at the light inlet wall (32), at least one focusing device (40) adapted to collimate the light beam (44) emitted by the source light (16) along a main propagation direction (X-X), wherein the light guide body (28) comprises at least one reflecting wall (48), arranged adjacent to said focusing device (40) and structured to receive a portion of the light beam (44) collimated by the focusing device (40) and to reflect it, thus satisfying the condition of total internal reflection on the reflecting wall (48) itself, towards the light outlet wall (36) along a secondary propagation direction (Y-Y), incident with the main propagation direction (X-X) according to an angle of incidence (\pm).

IPC 8 full level

F21S 43/14 (2018.01); **F21S 43/239** (2018.01); **F21S 43/243** (2018.01); **F21S 43/249** (2018.01); **F21W 107/10** (2018.01)

CPC (source: CN EP US)

F21S 41/148 (2017.12 - EP US); **F21S 41/151** (2017.12 - EP US); **F21S 41/24** (2017.12 - EP US); **F21S 43/00** (2017.12 - CN);
F21S 43/14 (2017.12 - EP); **F21S 43/239** (2017.12 - EP); **F21S 43/243** (2017.12 - EP); **F21S 43/249** (2017.12 - EP); **F21V 5/04** (2013.01 - CN);
F21V 7/00 (2013.01 - CN); **F21V 2200/00** (2015.01 - CN); **F21W 2107/10** (2017.12 - CN); **G02B 6/002** (2013.01 - EP)

Cited by

CZ307412B6; CN111365680A; CZ309526B6; CN109519869A; FR3122131A1; FR3133659A1; CN112262284A; US10761254B2;
DE102022114090A1; US11698177B2; WO2023017100A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3176500 A1 20170607; EP 3176500 B1 20201230; CN 106838759 A 20170613; CN 106838759 B 20201023; ES 2860768 T3 20211005;
IT UB20156264 A1 20170604; PL 3176500 T3 20210816

DOCDB simple family (application)

EP 16201409 A 20161130; CN 201611096851 A 20161202; ES 16201409 T 20161130; IT UB20156264 A 20151204; PL 16201409 T 20161130